

FREEDM® Fan-Out Tight-Buffered Cable, Riser

CORNING

Corning FREEDM® fan-out cables are designed for routing inside and outside buildings into riser spaces, to security, surveillance or monitoring cameras, and within telecommunications rooms and workstations. With no need for transition splices when entering a building, this cable provides low-fiber-count connections within building backbone riser and horizontal spaces. The indoor/outdoor temperature and water-resistant performance provides superior protection for applications, like traffic control, with optical feeds in rugged environments. Ideal for providing direct optical connections from indoor and outdoor surveillance cameras to security control locations, these cables can also provide a secure link for surveillance or data. The flame-retardant, 900 μm TBII Buffered Fibers are available in single-mode and multimode and enable easy, consistent stripping while the 2.0 mm subunits enable easy field terminations.

Features and Benefits

900 μm buffered fibers

Easy, consistent stripping

2.0 mm subunits

Easy field terminations

Flame-retardant jacket

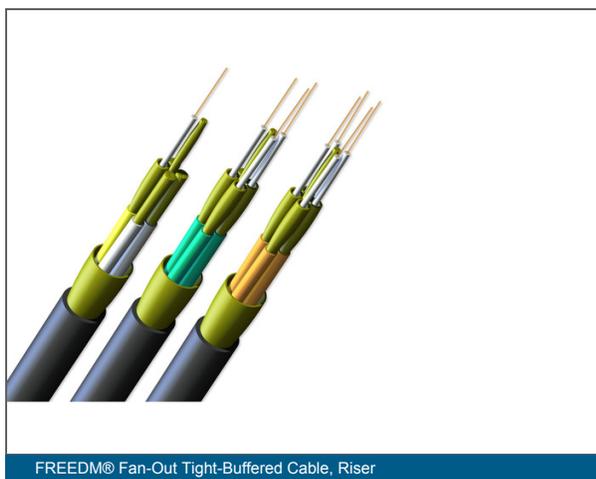
Rugged and durable

Temperature- and water-resistant

Superior protection

All-dielectric construction

Requires no grounding or bonding



FREEDM® Fan-Out Tight-Buffered Cable, Riser

FREEDM® Fan-Out Tight-Buffered Cable, Riser



Standards

RoHS	Free of hazardous substances according to RoHS 2011/65/EU
------	---

Specifications

General Specifications

Environment	Indoor/Outdoor
Product Type	Dielectric
Cable Type	Tight-Buffered
Flame Rating	Riser (OFNR)

Temperature Range

Temperature Range, Storage	-40 °C - 70 °C (-40 °F - 158 °F)
Temperature Range, Installation	-10 °C - 70 °C (14 °F - 158 °F)
Temperature Range, Operation	-40 °C - 70 °C (-40 °F - 158 °F)

Design Characteristics Cable

Fiber Count	Fibers per Tube	Number of Active Tubes
1 - 4	1	1 - 4

Mechanical Characteristics Cable

Fiber Count	Product Type	Min. Bend Radius Installation	Min. Bend Radius Operation	Max. Tensile Strength, Short-Term	Cable Weight
1 - 3	Dielectric	105 mm (4.13 in)	70 mm (2.76 in)	660 N (148.37 lbf)	32 kg/km (21.5 lb/1000 ft)
4	Dielectric	105 mm (4.13 in)	70 mm (2.76 in)	660 N (148.37 lbf)	31 kg/km (20.83 lb/1000 ft)

FREEDM® Fan-Out Tight-Buffered Cable, Riser



Mechanical Characteristics Cable					
Fiber Count	Product Type	Min. Bend Radius Installation	Min. Bend Radius Operation	Max. Tensile Strength, Short-Term	Cable Weight
4	Dielectric	105 mm (4.13 in)	70 mm (2.76 in)	660 N (148.37 lbf)	32 kg/km (21.5 lb/1000 ft)

Transmission Performance

Multimode					
Fiber Category	OM1	OM2	OM3	OM4	OM4 Extended Distance
Fiber Code	K	T	T	T	T
Performance Option Code	30	31	80	90	91
Fiber Core Diameter	62.5 μm	50 μm	50 μm	50 μm	50 μm
Wavelengths	850 nm / 1300 nm	850 nm / 1300 nm	850 nm / 1300 nm	850 nm / 1300 nm	850 nm / 1300 nm
Maximum Attenuation	3.4 dB/km / 1.0 dB/km	2.8 dB/km / 1.0 dB/km	2.8 dB/km / 1.0 dB/km	2.8 dB/km / 1.0 dB/km	2.8 dB/km / 1.0 dB/km
Serial 1 Gigabit Ethernet	300 m / 550 m	750 m / 600 m	1000 m / 600 m	1000 m / 600 m	1100 m / 600 m
Serial 10 Gigabit Ethernet	33 m / -	150 m / -	300 m / -	550 m / -	600 m / -
Min. Overfilled Launch (OFL) Bandwidth	200 MHz*km / 500 MHz*km	700 MHz*km / 500 MHz*km	1500 MHz*km / 500 MHz*km	3500 MHz*km / 500 MHz*km	3500 MHz*km / 500 MHz*km
Minimum Effective Modal Bandwidth (EMB)	220 MHz*km / -	950 MHz*km / -	2000 MHz*km / -	4700 MHz*km / -	5350 MHz*km / -

FREEDM® Fan-Out Tight-Buffered Cable, Riser



Transmission Performance

Single-mode	
Fiber Name	Single-mode (OS2)
Performance Option Code	31
Fiber Category	OS2
Wavelengths	1310 nm / 1383 nm / 1550 nm
Fiber Code	E
Maximum Attenuation	0.4 dB/km / 0.4 dB/km / 0.4 dB/km



1 Select fiber count.

Standard offerings:
001-004

2 Select fiber code.

K = 62.5 µm multimode (OM1)
T = 50 µm multimode (OM2/OM3/OM4/OM4+)
E = Single-mode (OS2)
SMF-28e+® fiber
Z = Single-mode (OS2)
SMF-28® Ultra

3 Defines cable type.

6 = Gel-free cable

4 Defines outer jacket.

F = FREEDM® Riser Indoor/
Outdoor Cable jacket

5 Defines fiber placement.

3 = Two subunits

6 Select length markings.

1 = Markings in ft (standard)

7 Defines subunit diameter.

3 = 2.0 mm subunits

8 Select performance option code.

30 = 62.5 µm multimode (OM1)
31 = 50 µm multimode (OM2)
80 = 50 µm multimode (OM3)
90 = 50 µm multimode (OM4)
91 = 50 µm multimode (OM4+)
31 = Single-mode OS2
(Max. attenuation .65 / .65 / 0.5 dB/km)

9 Defines cable type.

- = Gel-free cable

10 Defines special requirements.

29 = No special requirements



Corning Optical Communications LLC • 4200 Corning Place • Charlotte, NC • 28216 • United States
800-743-2675 • FAX: 828-325-5060 • International: +1-828-901-5000 • www.corning.com/opcomm

A complete listing of the trademarks of Corning Optical Communications is available at www.corning.com/opcomm/trademarks. All other trademarks are the properties of their respective owners. Corning Optical Communications is ISO 9001 certified. © 2026 Corning Optical Communications. All rights reserved.